

### **REMARKS**

By this amendment, claims 19 and 21 have been amended. Claims 2-3, 5, 8-12, 14, 17-22 are currently under examination, of which claims 19 and 21 are independent claims. Applicant respectfully submits that the above amendments do not add new matter to the application and are fully supported by the specification at least at page 6, lines 20-24.

In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections for the reasons discussed below.

#### ***Preliminary Matters***

A Petition for a three (3)-month extension of time under 37 C.F.R. §1.136(a) is filed herewith extending the period for response through October 5, 2006. It is not believed that any further extensions of time are required other than those in the accompanying Petition. If extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned for under 37 C.F.R. §1.136(a). Applicant believes that no further fees for net addition of claims are required at this time. Any fees required for extensions of time and any fees for the net addition of claims are hereby authorized to be charged to our Deposit Account No. 50331.

#### ***Rejections Under 35 U.S.C. §102***

Claims 2, 3, 10-12, 19 and 20 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,655,633 to Chapman, Jr. ("Chapman"). Applicants respectfully traverse this rejection for at least the following reasons.

Claim 19 is directed to structural composite sandwich “wherein said composite stiffening material comprises a continuous fiber metal matrix composite tape, comprising continuous aluminum oxide fibers.”

In order for claim 19 to be anticipated by Chapman, Chapman must teach each and every element of claim 19. (*See* MPEP §2131.) Chapman is directed to a fiber reinforced composite structure that includes a metal matrix composite that is wound about a tubular core. Since, at a minimum, Chapman does not disclose “continuous fiber metal matrix composite tape, comprising continuous aluminum oxide fibers,” Chapman does not disclose all the features of claim 19.

Since Chapman does not teach at least the elements of claim 19, claim 19 cannot be anticipated by Chapman. Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §102(e) rejection of claim 19. Claims 2, 3, 10-12, and 20 depend from claim 19 and for the reasons claim 19 is not anticipated by Chapman, Applicants respectfully submit that claims 2, 3, 10-12, and 20 are not anticipated by Chapman.

***Rejections Under 35 U.S.C. §102/§103***

Claims 5, 8, 9, 14, 17, 18, 21, and 22 stand rejected under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Chapman. Applicants respectfully traverse this rejection for at least the following reasons.

Claims 19 and 21 are directed to structural composite sandwich “wherein said composite stiffening material comprises a continuous fiber metal matrix composite tape, comprising continuous aluminum oxide fibers.”

In order for claims 19 and 21 to be anticipated by Chapman, Chapman must teach each and every element of claims 19 and 21. (*See* MPEP §2131.) Chapman is directed to a fiber reinforced composite structure that includes a metal matrix composite that is filament wound about a tubular core. Since, at a minimum, Chapman does not disclose continuous fiber metal matrix composite tape, Chapman does not disclose all the features of claims 19 and 21. The examiner has mistaken wrapping a metal coated fiber around a structure followed by heating to melt the metal with metal matrix composite tape. Metal matrix composite tape comprises a plurality of continuous fibers already consolidated in a metal matrix. Further, Chapman does not teach the use of aluminum oxide fibers as required in claims 19 and 21.

Since Chapman does not teach all the elements of claims 19 and 21, these claims cannot be anticipated by or obvious over Chapman. Claims 5, 8, 9, 14, 17, and 18 all depend from claim 19. For the reasons claim 19 is not anticipated or obvious over Chapman, claims 5, 8, 9, 14, 17, and 18 are not anticipated or obvious over Chapman. Claim 22 depends from claim 21 and for the reasons claim 21 is not anticipated or obvious over Chapman, claim 22 is not anticipated or obvious over Chapman. Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §102(e)/103(a) rejection of claims 5, 8, 9, 14, 17, 18, 21, and 22.

### ***Double Patenting***

Claims 2, 3, 5, 8-12, 14, 17-22 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending Application No. 11/000,521. Application No. 11/000,521 is commonly owned with the present application. Accordingly, Applicants respectfully request that this rejection be held in abeyance until the allowance of currently pending claims.

***Conclusion***

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution. Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



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